

NOTE

Seasonal Flight Activity of *Vanhornia eucnemidarum* Crawford
(Hymenoptera: Vanhorniidae) in the Mid-Atlantic States

I have been collecting with Malaise traps at various sites in Maryland, Virginia, and West Virginia from the coastal plain to the West Virginian and western Maryland Appalachians for more than ten years. The traps were in operation for the full season, from March or April to October or mid-November, depending on the site, and I have been able to accumulate seasonal flight data on an array of groups. I have always kept specimens and records of *Vanhornia eucnemidarum*, the only described North American species of the family. It has been considered rather rare and is scarce in collections. Most collection records of *V. eucnemidarum* are in spring, and the data presented here, based on collections of 398 specimens, verify it as a univoltine, spring-flying species. Deyrup (1985. Great Lakes Entomologist 18: 65–68) gave a comprehensive account of the biology and taxonomy of this species from his work in Indiana.

Specimens of *V. eucnemidarum* are not common, but I have found them at seven collecting sites where I have trapped. Specimens have been taken from mid-May to to late July, with the peak flight during the last third of May to the end of June (Fig. 1). The earliest record was V-8-14-1985 from Fairfax Co., Virginia, and the latest record was VII-19-28-1992 from Tucker Co., West Virginia.

Vanhornia eucnemidarum is known from Quebec west to Michigan, south to Georgia and Kentucky (Deyrup 1985). Localities for specimens I have examined are as follows, with the earliest and latest dates of collection, years of trapping, (number of specimens trapped, and number of traps used per year): MARYLAND: Prince Georges Co.,

Beltsville Agricultural Research Center, -- 16-23 to VII-11-24, 1991–1993 (32; 3 to 4 traps). VIRGINIA: Clarke Co., University of Virginia Blandy Experimental Farm, 2 mi. S. Boyce, VI-1-11 to VII-6-19, 1990–1994 (25; 5 to 11 traps); Fairfax Co., near Annandale, V-8-14 to VII-17-23, 1982–1994 (247; 1 trap); Essex Co., 1 mi. SE Dunnsville, V-13-29 to VII-10-27, 1991–1994 (75; 10 to 16 traps); Louisa Co., 4 mi. S. Cuckoo, V-28-VI-5 to VI-16-25, 1987–1989 (13; 4 to 12 traps). WEST VIRGINIA: Tucker Co., Fernow Experimental Forest, ca. 3 mi. S. Parsons, VI-10-19 to VII-19-28, 1991–1993 (5; 20 traps); Hardy Co., 3 mi. NE Mathias, VII-5-18, 1994 (1; 2 traps).

Vanhornia eucnemidarum is a parasitoid of beetles of the family Eucnemidae (see Deyrup 1985). Eucnemidae are found in wood that has just begun to decay, mainly in beech and maple. Most of the collections were in traps in woods or wood edges, a habitat where the hosts would be expected. All of the Tucker Co. traps were set within a broadleaf forest. The largest collections, however, were from a trap adjacent to a woodpile in my backyard (Fairfax Co.). I found specimens in this trap each of the 13 years of operation. We have a number of large silver maples (*Acer saccharum* Marsh.) around the house, and we frequently cut limbs and branches and add them to the woodpile, thus there is wood in various states of decay. Little did I know that I was creating a habitat suitable for the host beetle and its parasitoid as well.

I thank the following for allowing field work on their properties: M. Bowers, C. Sacchi, and E. Connor, University of Virginia Blandy Experimental Farm; J. and B.

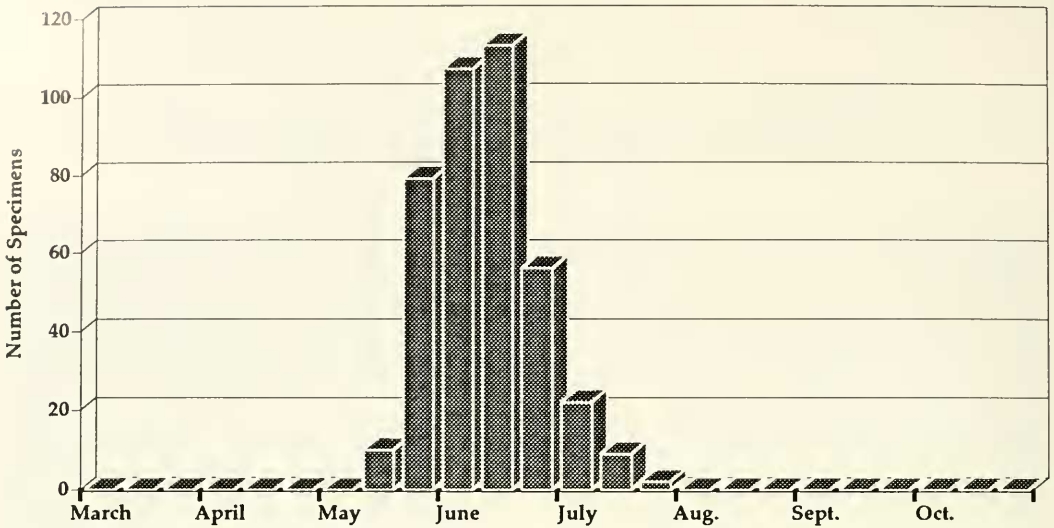


Fig. 1. Seasonal flight activity of *Vanhormia eucnemidarum* in the mid-Atlantic states. Includes records from all sites from 1982–1994.

Kloke, Louisa and Essex counties, Virginia; and T. J. Henry and D. R. Miller, Hardy Co., West Virginia. E.M. Barrows, Georgetown University, Washington, D.C., provided specimens from the Fernow Experimental Forest, Tucker Co., West Virginia.

David R. Smith, *Systematic Entomology Laboratory, PSI, Agricultural Research Service, U.S. Department of Agriculture, % National Museum of Natural History, NHB 168, Washington, D.C. 20560.*